What is Claimed is:

1. A data source, comprising:

data converting means for converting inputted data to a predetermined data packets;

a data buffer storing said data packets;

a descriptor list storing a descriptor to which predetermined address are added, where a method of sending said data packets is described;

a FIFO storing said predetermined addresses in a first-in first-out mode; and

data sending means that upon receiving start instructions from said data converting means, refers to said predetermined address to which reference is not made yet in said FIFO, fetches data packets corresponding to said descriptor from said data buffer in accordance with a method of sending said descriptor indicated by said predetermined address, generates a send packet from said data packet and outputs the same, and sends an end-of-send notice to said data converting means when the output of said send packet is ended,

the number of said predetermined addresses to be stored in said FIFO being N (N: larger than or equal to 1 and smaller than the total number of said descriptors).

2. The data source according to claim 1, wherein said data converting means newly stores predetermined addresses in said

FIFO only when the number of said predetermined addresses is smaller than N; and

when N of predetermined addresses are already stored in said FIFO, waits until said end-of-send notice is received,

upon receiving said end-of-send notice, fetches said predetermined address from said FIFO and discards it, and then

when there exists a non-storage descriptor not storing yet predetermined address in said FIFO on said descriptor list, stores said non-storage descriptor in said FIFO.

3. The data source according to claim 2, wherein said data converting means, when M of said end-of send notices arrive (M is fixed or variable), fetches M of said second addresses in a batch from said FIFO and discards them.

4. The data source according to claim 2 or 3, wherein said data sending means is an IEEE 1394 interface and said send packet is an isochronus packet in IEEE 1394.

5. The data source according to claim 4, wherein said data packet is a common isochronus packet in IEC 61883.

6. A data conversion device outputting data in response to a file read request, comprising:

request analyzing means for analyzing said read request composed of at least an offset position from the front-end of said file and the size of data to be read; and

selecting means for selecting and outputting predetermined data in accordance with instructions from said request analyzing means.

7.   The data conversion device according to claim 6, wherein said file is an avi format file,

said request analyzing means analyzes which portion of header information, index information, video data and audio data is requested, and

said selecting means selects each data that is placed on a predetermined position based on the result of said request analyzing means, and rearranges the data in accordance with the avi format and outputs the same.

8.   The data conversion device according to claim 7, wherein said request analyzing means, when video data is requested, controls recording/regenerating means in which said video data is recorded so that said video data can be obtained.

9.   An auxiliary data file generation device generating header information of an avi format file as a header file and index information as an index file, comprising:

stream data analyzing means for analyzing stream data to be inputted and extracting information needed for generating said header information and said index information;

header information generating means for providing

instructions to convert information needed for generating

said header information extracted by said stream data

analyzing means to a predetermined format and save the

information as said header file; and

index information generating means for providing

instructions to convert information needed for generating

said index information obtained by said stream data analyzing

means to a predetermined format and save the information as

said index file.

10. The auxiliary data file generation device according to

claim 9, wherein said stream data analyzing means further

comprises audio information generating means for analyzing

stream data to be inputted to extract audio data, and

providing instructions to convert said audio data

extracted by said stream data analyzing means to a

predetermined format and save the data as a audio data file.

11. A data inverse conversion device outputting data in

response to a file write request, comprising:

a buffer; and

request analyzing means for providing control so that

data to be recorded in a recorder from said write request

composed of at least an offset position from the front-end

of said file, the size of data to be written and write data

is extracted and is outputted to said buffer, and the content

of said buffer is outputted to said recorder when data

accumulated in said buffer reaches a predetermined amount.

12. The data inverse conversion device according to claim

11, wherein said file is an avi format file, and

said request analyzing means splits write data into

header information, index information, video information and

audio information, and outputs the video data and audio data

to said buffer.

13. The data inverse conversion device according to claim

12, wherein said file is a file of avi format DV data,

said buffer is configured by a first buffer and a second

buffer, and

said request analyzing means provides control so that

audio data is outputted to said first buffer, video data is

outputted to said second buffer, and when a predetermined

amount of video data is accumulated in said second buffer,

the audio data of said first buffer is overwritten on the

audio data interleaved in the video data of said second buffer

and is outputted to said recorder.

14. An auxiliary data file generation device generating

header information of a avi format file as a header file,

and index information as an index file, comprising:

request analyzing means for extracting said header information and said index information from said write request composed of at least an offset position from the front-end of said file, the size of data to be written and write data;

header information separating means for providing instructions to save as said header file said header information extracted by said request analyzing means; and

index information generating means for providing instructions to save as said index file said index information obtained by said request analyzing means.

15. The auxiliary data file generation device according to claim 14, wherein said request analyzing means further comprises audio information generating means for extracting audio data from said write request, and

providing instructions to convert said audio data extracted by said request analyzing means to a predetermined format and save the data as a audio data file.

16. A data conversion method, wherein which portion of header information, index information, video data and audio data is requested by the read request of said file composed of at least an offset position from the front-end of an avi format file and the size of data to be read is analyzed, and

each data that is placed in a predetermined position is read, and data that is rearranged to the avi format is obtained, based on the result of the analysis.

17. The data conversion method according to claim 16, wherein when video data is requested, the recording/regenerating means in which said video data is recorded is controlled so that said video data can be obtained.

18. An auxiliary data file generation method, wherein stream data to be inputted is analyzed, and information needed for generating header information based on the avi format and index information based on the avi format is extracted,

the information that is obtained in order to generate said header information is converted to a predetermined format and is saved as a header file, and

the information that is obtained in order to generate said index information is converted to a predetermined format and is saved as an index file.

19. The auxiliary data file generation method according to claim 18, wherein stream data to be inputted is analyzed, and audio data based on the avi format is extracted, is converted to a predetermined format, and is saved as a file.

20. A data inverse conversion method, wherein the write request of said file composed of at least an offset position from the front-end of an avi format file, the size of data

to be written and write data is analyzed to extract video

data and audio data from said write data,

said video data and said audio data are rearranged as

stream data, and

said stream data is outputted for each predetermined

amount.

21. The data inverse conversion method according to claim

20, wherein said file is a file of avi format DV data, and

the data split as audio data is overwritten on the audio

data that is interleaved in the data split as video data,

and is outputted, when said stream data is outputted.

22. An auxiliary data file generation method, wherein the

write request of said file composed of at least an offset

position from the front-end of an avi format file, the size

of data to be written and write data is analyzed to extract

header information based on the avi format and index

information based on the avi format from said write data,

said header information data is saved as a header file

and said index information is saved as an index file.

23. The auxiliary data file generation method according to

claim 22, wherein audio data based on the avi format is

extracted from said write request, is converted to a

predetermined format, and is saved as a file.

24. A reception method, wherein in the case where a data sink conforming substantially with IEC 61883 and a data source conforming with IEC 61883 are connected to an IEEE 1394 bus, and

in the case where said data sink is a personal computer having an IEEE 1394 interface and device controlling means for controlling all or part of devices connected to said IEEE 1394 bus,

upon receiving start-of-reception instructions, said data sink determines whether said data source outputs output data to said IEEE 1394 bus using broadcast transmission, and

in the case where said data source outputs said output data to said IEEE 1394 bus using broadcast transmission,

said data sink receives said output data without establishing a point-to-point connection to said data source.

25. The reception method according to claim 24, wherein said data source has an output control register,

said output control register includes a flag indicating whether broadcast transmission is performed and a channel number indicating which channel said output data is outputted to, and

in the case where said data sink is said personal computer,

said data sink determines by reading said flag whether said data source outputs said output data to said IEEE 1394 bus using broadcast transmission, and

in the case where said data source outputs said output data to said IEEE 1394 bus using broadcast transmission,

said data sink receives said output data from the channel for which said channel number is described without changing said channel number.

26. The reception method according to claim 24, wherein said data source has an output control register,

said output control register includes therein a flag indicating whether broadcast transmission is performed and a channel number indicating to which channel the output data is outputted, and

in the case where said data sink is said personal computer,

said data sink determines by reading said flag whether said data source outputs said output data to said IEEE 1394 bus using broadcast transmission, and

said data sink changes said channel number to an arbitrary value N (N is a integer between 0 and 63), followed by receiving said output data from a channel whose channel number is said N.

27. The reception method according to claim 25 or 26, wherein in the case where said data source does not output said output data to the IEEE 1394 bus,

in the case where said data sink is said personal computer,

after said data sink establishs a point-to-point connection to said data source, said data source starts outputting said output data to said IEEE 1394 bus, and at the same time said data sink receives said output data.

28. The reception method according to any one of claims 25 to 27, wherein a second data sink conforming to IEC 61883 is connected to said IEEE 1394 bus, and

in the case where said data source outputs said output data to said IEEE 1394 bus under the condition that said data source is established with or establishs a point-to-point connection to said second data sink, and without using broadcast transmission, and

in the case where said data sink is said personal computer,

said data sink establishs a point-to-point connection to said data source, and receives said output data.

29. The reception method according to any one of claims 24 to 28, wherein said data source is a digital VCR for use at home.

30. The reception method according to any one of claims 24 to 28, wherein said data source is a set top box outputting MPEG data.

31. A medium carrying a program and/or data for having all or part of functions of all or part of means of the data source, the data conversion device, the auxiliary data file generation device or the data inverse conversion device according to any one of claims 1 to 30 executed by the computer, wherein said medium can be processed by the computer.

32. An information aggregate, wherein said information aggregate is a program and/or data for having all or part of functions of all or part of means of the data source, the data conversion device, auxiliary data file generation device or the data inverse conversion device according to any one of claims 1 to 30 executed by the computer.

33. A medium that carries a program and/or data for having all or part of operations of all or part of steps of the data conversion method, the auxiliary data file generation method, the data inverse conversion method or the reception method according to any one of claims 1 to 30 executed by the computer, wherein said medium can be processed by the computer.

34. An information aggregate wherein said information aggregate is a program and/or data for having all or part of operations of all or part of steps of the data conversion

method, the auxiliary data file generation method, the data

inverse conversion method or the reception method according

to any one of claims 1 to 30 executed by the computer.